

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of claims:

Claim 1. (currently amended) An implantable medical device for insertion into a body cavity, comprising

an expandable balloon having a toroidal shape, ~~a lumen, and a hole, the balloon having an internal surface comprising first grooves and first ridges defining a passageway and a lumen a hole, the passageway comprising at least one first annular ridge and at least one first annular groove juxtaposed to the first annular ridge, a plane of the first annular ridge and of the annular groove being perpendicular to an axis of the passageway;~~ and

an insert configured to be received and secured in the ~~[[hole]]~~ passageway, having an external surface comprising insert grooves and insert ridges that are complementary to the first annular groove grooves and first annular ridge ridges.

Claim 2. (currently amended) The device according to claim 1, ~~being formed with further comprising~~ a magnetizable portion.

Claim 3. (previously presented) The device according to claim 2, wherein the magnetizable portion comprises one or more magnetizable particles in the lumen of the balloon, attached to a wall of the balloon, or embedded in the wall of the balloon.

Claim 4. (previously presented) The device according to claim 2, wherein the magnetizable portion of the balloon comprises one or more magnetizable particles in a lumen of the insert, attached to a wall of the insert, or embedded in a wall of the insert.

Claim 5. (previously presented) The device according to claim 1, wherein the body cavity is a urinary bladder or a digestive tract organ.

Claim 6. (previously presented) The device according to claim 1, in which the balloon further comprises a self-sealing valve.

Claim 7. (previously presented) The device according to claim 1, wherein the device upon expansion of the balloon floats in the body cavity.

Claim 8. (previously presented) The device according to claim 1, wherein the device upon expansion of the balloon sinks in the body cavity.

Claim 9. (currently amended) The device according to claim 1, wherein the insert is configured to ~~storing~~ store one or more substances and ~~releasing~~ release them into the body cavity.

Claim 10. (previously presented) The device according to claim 9, wherein the one or more substances are stored in a lumen of the insert.

Claim 11. (currently amended) The ~~balloon~~ device according to claim 9, wherein ~~the one or more substances are stored in a wall of the insert~~ comprises a means for storing one or more substances.

Claim 12. (previously presented) The device according to claim 9, wherein one or more of the one or more substances are drugs or antibiotics.

Claim 13. (previously presented) The device according to claim 9, wherein one or more of the one or more substances are radioactive substances.

Claim 14. (previously presented) The device according to claim 1, wherein the insert comprises a device for imaging the body cavity.

Claim 15. (previously presented) The device according to claim 1, wherein the insert comprises one or more devices for monitoring one or more parameters of the body cavity or its contents.

Claim 16. (previously presented) The device according to claim 15, wherein one or more of the one or more devices monitors a parameter of the body selected from the group consisting of fluid pressure; fluid temperature; fluid density; and fluid composition.

Claim 17. (previously presented) The device according to claim 14, wherein the insert comprises an imaging transmitter for transmitting signals from the imaging device to a receiver.

Claim 18. (previously presented) The device according to claim 15, wherein the insert further comprises a transmitter for transmitting signals from the monitoring device to a receiver.

Claim 19. (currently amended) A system for treating a body cavity of an individual, the system comprising:

an implantable medical device for insertion into a body cavity, comprising
~~an expandable balloon having a toroidal shape, a lumen, and a hole, the balloon having an internal surface comprising first grooves and first ridges defining a passageway and a lumen the passageway comprising at least one first annular ridge and at least one first annular groove juxtaposed to the first annular ridge, a plane of the first annular ridge and of the annular groove being perpendicular to an axis of the passageway; and~~

an insert configured to be received and secured in the [[hole]] passageway, having an external surface comprising insert grooves and insert ridges that are complementary to the first annular grooves and first annular ridges, an applicator for inserting the device into the body of an individual or for removing the device from the individual's body cavity, the applicator fitted at an end thereof with a gripping device for releasably gripping the balloon; an expanding device for expanding the balloon in the body cavity; and a magnetizable displacing member for displacing the device within the body cavity.

Claim 20. (previously presented) The system according to claim 19, further comprising an immobilizing member comprising a magnetizable portion, said immobilizing member being secured onto the individual's body for immobilizing the device at a desired location in the body cavity.

Claim 21. (previously presented) The system according to claim 20, wherein the immobilizing member is in the form of a hygienic pad to be placed in the individual's clothing.

Claim 22. (currently amended) The system according to [[of]] claim 19, wherein the gripping device comprises flanges.

Claim 23. (currently amended) The system according to [[of]] claim 19, wherein the gripping device comprises a magnetizable portion.

Claim 24. (currently amended) The system according to [[of]] claim 14, wherein the expanding device comprises an injector for injecting a fluid into the balloon so as to expand the balloon.

Claim 25. (currently amended) The system according to [[of]] claim 19, wherein the expanding device comprises a decompressor for decompressing a ~~previously compressed~~ balloon so as to expand the balloon.

Claim 26. (Cancelled.)

Claim 27. (currently amended) The system according to claim 19, wherein the insert comprises one or more devices for monitoring one or more parameters of the body cavity or its contents, a transmitter for transmitting signals from the monitoring device to a receiver, and a receiver for receiving signals from said transmitter.

Claim 28. (currently amended) The system according to [[Claim]] claim 27, further comprising one or more components selected from the group consisting of[:]

- a processing unit for processing signals received from the receiver;
- a display for displaying signals received by the receiver; and
- a display for displaying an output produced by a processing unit.

Claim 29. (currently amended) The system according to [[Claim]] claim 27, for use in monitoring one or more parameters of the body cavity selected from the group consisting of[:]

- fluid temperature;
- fluid pressure;
- fluid density;
- fluid conductivity; and
- fluid composition.

Claim 30. (Cancelled.)

Claim 31. (currently amended) The system according to claim 27, further comprising one or more components selected from the group consisting of[:]

- [(a)] a processing unit for processing signals received from the receiver;
- [(b)] a display for displaying signals received by the receiver; and
- [(c)] a display for displaying an output produced by a processing unit.

Claim 32. (previously presented) The system according to claim 27, for use in imaging the body cavity.

Claim 33. (currently amended) A method for treating urinary incontinence in an individual comprising:

inserting into the individual's urinary bladder an implantable medical device for insertion into a body cavity, comprising

~~an expandable balloon having a toroidal shape, a lumen, and a hole, the balloon having an internal surface comprising first grooves and first ridges defining a passageway and a lumen the passageway comprising at least one first annular ridge and at least one first annular groove juxtaposed to the first annular ridge, a plane of the first annular ridge and of the annular groove being perpendicular to an axis of the passageway; and~~

~~an insert configured to be received and secured in the [[hole]] passageway, having an external surface comprising insert grooves and insert ridges that are complementary to the first annular grooves and first annular ridges, and wherein the device is formed with a magnetizable portion;~~

~~expanding the balloon in the urinary bladder;~~

~~displacing the device into a sealing position for sealing the urinary bladder; and~~

~~displacing the balloon within the urinary bladder into an unsealing position for voiding the urinary bladder.~~

Claim 34. (currently amended) A method for releasing one or more substances into a body cavity of an individual comprising:

~~loading the one or more substances into the insert of a device an expandable balloon having a toroidal shape, a lumen, and a hole, the balloon having an internal surface comprising first grooves and first ridges defining a passageway and a lumen the passageway comprising at least one first annular ridge and at least one first annular groove juxtaposed to the first annular ridge, a plane of the first annular ridge and of the annular groove being perpendicular to an axis of the passageway; and~~

an insert configured to be received and secured in the [[hole]] passageway, having an external surface comprising insert grooves and insert ridges that are complementary to the first annular grooves and first annular ridges, wherein the insert is capable of storing configured to store one or more compounds and releasing release them into the body cavity;
inserting the device into the body cavity;
expanding the balloon in the body cavity; and
displacing the device within the body cavity to a desired location.

Claim 35. (currently amended) The method of claim 34, wherein one or more of the one or more substances are selected from the group consisting of[:]]

drugs;
antibiotics; and
radioactive substances.

Claim 36. (currently amended) A method for monitoring the interior of a body cavity:

inserting into the body cavity an implantable medical device for insertion into a body cavity, comprising

an expandable balloon having a toroidal shape, a lumen, and a hole, the balloon having an internal surface comprising first grooves and first ridges defining a passageway and a lumen the passageway comprising at least one first annular ridge and at least one first annular groove juxtaposed to the first annular ridge, a plane of the first annular ridge and of the annular groove being perpendicular to an axis of the passageway; and

an insert configured to be received and secured in the [[hole]] passageway, having an external surface comprising insert grooves and insert ridges that are complementary to the first annular grooves and first annular ridges, wherein the insert comprises a device for imaging the body cavity and a transmitter for transmitting signals from the imaging device to a receiver;
expanding the balloon in the body cavity;

displacing the device within the body cavity to a desired location within the body cavity;
and

transmitting signals from one or more of the one or more monitoring devices to a receiver.

Claim 37. (currently amended) A method for imagining the interior of a body cavity comprising:

[(a)] inserting into the individual's urinary bladder[[:]] an implantable medical device comprising

[[a]] an expandable balloon having a wall and a lumen and having a toroidal shape defining a hole, defining a passageway and a lumen, the passageway comprising at least one first annular ridge and at least one first annular groove juxtaposed to the first annular ridge, a plane of the first annular ridge and of the annular groove being perpendicular to an axis of the passageway; and

an insert configured to be received and secured in the hole by grooves and ridges on an external surface of the insert which are received in complementary grooves and ridges on an external surface of a wall of the hole passageway, and having an external surface comprising insert grooves and insert ridges that are complementary to the first annular grooves and first annular ridges, wherein the insert comprises [[a]] an imaging device for imaging the body cavity, and wherein the insert comprises a transmitter for transmitting signals from the imaging device to a receiver;

[(b)] expanding the balloon in the urinary bladder;

[(c)] displacing the balloon within the urinary bladder to a desired location within the urinary bladder; and

[(d)] transmitting signals from the imaging device to a receiver.

Claim 38. (currently amended) The method of [[Claim]] claim 36, further comprising one or more steps selected from the group consisting of[:]]

storing the signals in a computer memory;

displaying the signals on a display;

processing the signals in a computer processing unit;

storing results of the processing in a computer memory; and
displaying results of the processing on a display.